

SLEEP IMPROVEMENT PROGRAMS FOR FIREFIGHTERS—A CRITICALLY APPRAISED TOPIC

INTRODUCTION

Clinical Scenario: Firefighter shift work is correlated with poor sleep health and sleep deprivation. These sleep issues compound over time and are accompanied by a range of mental and physical health issues. Information gleaned from sleep-related firefighter research supports the need for sleep hygiene accommodations in firefighters. Implementing a sleep program to aid in behavior change and improve sleep health and the number of hours slept may improve occupational performance and health markers while also reducing associated occupational risk and improving the overall quality of life. Various length sleep protocols have been examined in research and include screening for sleep disorders, education sessions, and have shown potential to improve quality and quantity of sleep attained by firefighters.

Clinical Question: Can sleep programs improve sleep health and quantity in occupational firefighters?

Key Findings: The literature was searched for studies investigating sleep quality or quantity, and that implemented a sleep improvement plan in occupational firefighters. The following studies were identified as the best evidence and selected for inclusion for this critically appraised topic (CAT). These studies were selected because they demonstrated the highest level of research integrity (level 1 evidence), explored sleep disorder risk in firefighters, and subsequently provided a diagnosis and treatment recommendation.

PRACTITIONER SCENARIO

Tactical facilitators seek to base their advice and programming on solid evidentiary research findings. However, having the time and access to the most current research can be problematic. The current article used a CAT approach, summarizing the best available research evidence on the topic of sleep health and firefighters, to describe effective implementation methods for improving sleep in this population. Firefighter shift work ranges from 24 – 96 hr depending on the department and is comprised of frequent emergency calls, exposure to traumatic events, and unforeseen circumstances. Due to this, it is linked with poor sleep health, sleep deprivation, and altered circadian rhythm (1,4). These sleep issues result in degraded performance and both physical and mental health (1,4). Sleep issues may result in frequent caffeine and alcohol use, poor eating patterns, and subsequent elevated occupational risk (1,3,4). Implementing a program to promote behavior change, resulting in an improvement of sleep hygiene and the number of hours slept, is requisite and would aid in reducing occupational risk while improving performance, health markers, and improving the overall quality of life (1,2,4). Research protocols screening for sleep disorders and providing education sessions, sleep disorder diagnosis, and sleep disorder treatment have shown promise in improving sleep hygiene in firefighters and should be considered when working with the firefighter population (1,2,4).

FOCUSED QUESTION